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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,887	01/16/2004	Shawn A. McAuley	BOEI-1-1227	6992

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EXAMINER

RADI, JOHN A

ART UNIT	PAPER NUMBER
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3641

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/758,887

Applicant(s)

MCAULEY, SHAWN A.

Examiner

John A. Radi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 17-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15 and 16 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/21/04</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-16, drawn to Piston Actuator, classified in class 92, subclass 23.
- II. Claims 17-25, drawn to a Thrust Reverser Combination, classified in class

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 244 subclass 10/758,887

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The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination does not require at least one groove projecting from the recess into the piston. The subcombination has separate utility such as a locking piston actuator for doors or panels on automobiles.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Graham on December 19, 2005 a provisional election was made without traverse to prosecute the invention of the locking piston actuator, claims 1-16. Affirmation of this election must be made by applicant in writing. The combination as claimed does not require the particulars of the subcombination as claimed because the combination does not require at least one groove projecting from the recess into the piston. The subcombination has separate utility, such as a locking piston actuator for doors or panels on automobiles.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction

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replying to this Office action. Claims 17-25 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

The specification is objected to for the following informality: Page 3, line 26 of the specification should be "scraper 14" not "scraper 40". Correction is required

Claim Rejections - 35 USC § 102

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Hart (US 6832540).

Hart teaches a locking actuator comprising: a piston (500) adapted to be moved by a drive mechanism (538), the piston having a first end (left side) and a second end (right side), the second end being adapted to link to an apparatus (518) to be driven by the actuator, the piston defining a recess originating proximal the first end (509); a strut (544) having a base (left side) and a tip (right side), the strut adapted to at least partially nest within the recess (figure 6), the strut adapted to hold at least one locking mechanism proximal to the tip; and, at least one locking mechanism (589a, 589b) held

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by the strut, the at least one locking mechanism adapted to move into a first position engaging the piston when the actuator is locked and adapted to move to a second position not engaging the piston when the actuator is unlocked (abstract).

With respect to claim 2, the drive mechanism is hydraulically pressurized (Hart abstract).

With respect to claim 4, the locking mechanism engages the piston when in the extended position (figure 6, note that 589b engages 553 when the piston moves to the right, the extended position).

Claims 1, and 5-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Marx et al. (US 5379969).

Marx teaches a locking actuator comprising: a piston (34) adapted to be moved by a drive mechanism (83, 82 acting on face 60) the piston having a first end (right) and second end (left), the second end being adapted to link to an apparatus (abstract, links to thrust reversers) to be driven by the actuator, the piston (34) defining a recess (lock bolt cavity 52, also labeled CB cylinder body); a strut (LP locking piston) having a base (right side) and a tip (left side), the strut adapted to at least partially nest within the recess (figure 8), the strut adapted to hold at least one locking mechanism proximal to the tip (lock bolt LB); held by the strut, the at least one locking mechanism adapted to move into a first position engaging the piston when the actuator is locked and adapted to move to a second position not engaging the piston when the actuator is unlocked (abstract).

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With respect to claims 5, 6 and 11-13, further comprising a shaft (PR) movably held within the strut (74), the shaft defining a ramp proximal the tip adapted to move the locking mechanism between locked and unlocked position (figures 8-13).

With respect to claim 7, 8, 10, 15 and 16, wherein the locking piston is released hydraulically, see Abstract wherein "the locking piston (LP) includes a piston face (60) against which hydraulic fluid pressure may be directed, to move the locking piston (LP) axially, for retracting the bolt block (62) out from its position radially inwardly of the lock bolt or bolts (LB)..." With regard to the spring biasing the shaft, see (S) in figures 8, and 10. With regard to the second hydraulic cylinder to move within the shaft, see locking piston (LP) which moves within the strut (82).

Allowable Subject Matter

Claim 14 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pace (US 5692851) which defines a hydraulically operated quick release piston similar in operation to applicant's claimed invention. See attached form PTO-892 for other relevant hydraulically operated locking actuators and pistons.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Radi whose telephone number is 571-272-5883. The examiner can normally be reached on M-F 8-5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John A. Radi
Patent Examiner
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Michael J. Carone
SPE 3641